What is claimed is:

1. A filtering system for filtering solid waste comprising:

a first rotary filter having a first elongated filtering cylinder with porous outside surface, a first and second end and an internal auger;

a tank operably connected to the first rotary filter and adapted to receive liquid from the first rotary filter; and

a second rotary filter, having a second elongated filtering cylinder with a porous outside surface, and a first and second end forming an interior chamber, partially disposed within the tank and adapted to receive solid waste from the first rotary filter.

2. The filtering system of claim 1 further comprising a means for removing solid waste from the outside surface of the second rotary filter operably connected to the tank.

3. The filtering system of claim 1 further comprising a pipe in communication with the interior chamber of the second elongated filtering cylinder.

4. The filtering system of claim 3 further comprising injection means fluidly connected to the pipe.

5. The filtering system of claim 2 wherein the means for removing solid waste is a scraper.

6. The filtering system of claim 2 wherein the means for remaining solid waste is an air knife.

7. The filter system of claim 1 further comprising a backwashing means for backwashing the first filter while the system is in operation.

8. The filter system of claim 1 further comprising a backwashing means for backwashing the second filter while the system is in operation.

9. The filter of claim 1 wherein the auger and the first elongated filtering cylinder are operably connected with a bayonet connection.

10. The filtering system of claim 1 further comprising a first gear operably connected to the first filter and a second gear operably connected to the second filter such that that the first and second gears are driven from a common drive.

11. The filtering system of claim 10 wherein the first gear and the second gear are driven at different speeds.

12. The filtering system of claim 1 wherein the first elongated filtering cylinder of the first rotary filter is made of wedge shaped wires wound to leave a consistent gap to allow liquid to pass, but prevent the passing of solids of a predetermined size.

13. The filtering system of claim 1 wherein the first elongated filtering cylinder of the first rotary filter is made of wedge shaped wires wound to leave a gap between wires that varies in a predefined manner along its length to

progressively allow increasing sizes of solids to pass through.

14. The filtering system of claim 1 wherein the auger of the first rotary filter is of uniform height along its length.

15. The filtering system of claim 1 wherein the auger of the first rotary filter is of a height that varies along its length to optimize the filtration of liquid through the filtering cylinder.

16. The filtering system of claim 1 wherein the auger of the first rotary filter has a uniform pitch along its length.

17. The filtering system of claim 1 wherein the auger of the first rotary filter has a variable pitch along its length to optimize the filtration of liquid through the filtering cylinder.

18. The filtering system of claim 1 wherein the auger and first filtering cylinder are rotated at different speeds.

19. A method of filtering solids from a suspension of liquids and solids comprising steps of:

introducing a solid and liquid solution into a first rotary filter having a first elongated filtering cylinder and an internal auger;

allowing the liquid to pass through a porous outer cylinder while the solids are transferred by the auger to the second end of the filter;

dropping the solids onto the exterior of a second rotary filter having a second elongated filtering cylinder with first and second ends, a porous outside surface, and partially disposed in a tank;

rotating the second rotary filter so that the solids are transferred to a scraper while any remaining fluid, together with fluid from the tank passes through the porous outer surface from where it can be pumped out of the filtering system.

20. The method of claim 19 wherein the second rotary filter also removes foam from the surface of the liquid in the tank.

21. The method of claim 19 wherein fluid is pumped at high pressure at the inside of the surface of the second rotary filter to back flush it and force particles that may be clogging it back into the tank.